

APPENDIX E.—ACTUARIAL ESTIMATES FOR THE OASI, DI, AND HI PROGRAMS, COMBINED

In this appendix, actuarial estimates for the OASI, DI, and Hospital Insurance (HI) programs are combined to facilitate analysis of the adequacy of the combined income and assets of these three trust funds relative to their combined expenditures. These estimates represent the combination of the estimates shown in this report and in the concurrent report for the HI Trust Fund.

Public Law 97-123 granted limited authority for borrowing among the OASI, DI, and HI Trust Funds; this authority expired on December 31, 1982. The Social Security Amendments of 1983 reinstated interfund borrowing authority and extended it through the end of 1987. In addition, the current provisions of the law (1) prohibit new loans from a trust fund if its assets are below specified levels, and (2) set forth minimum standards for the repayment of interfund loans (including a requirement for the complete repayment of all such loans before 1990). Estimates shown in this appendix for the combined trust funds are theoretical after 1987 because, under present law, no authority exists for transferring assets from one trust fund to another after 1987 except to repay amounts owed. Thus, the emphasis in this appendix on combined operations should not obscure the financial status of the individual trust funds.

Table E1 shows estimated assets of the three funds, separate and combined, as a percentage of annual expenditures for calendar years 1985-94, based on the four alternative sets of assumptions used in this report. These estimates indicate that, except on the basis of alternative III, no further interfund loans would be necessary during 1985-87. On the basis of alternative III, the assets of the DI Trust Fund would be insufficient to allow the timely payment of DI benefits by the end of 1987. As described earlier in this report, an interfund loan could postpone the depletion of the DI fund; the amount borrowed, however, could not be repaid by the mandated deadline of December 31, 1989, without corrective legislation.

The estimates also indicate that, except on the basis of alternative III, the \$10.6 billion owed from the OASI Trust Fund to the HI Trust Fund, after the repayment of \$1.8 billion in January 1985, would be repaid by early 1987 using the minimum standard in the law, based on the trust fund ratio, for repayment of such amounts owed. Based on alternative III, a small repayment would be required to the HI Trust Fund in 1986, with the remainder being repaid in 24 monthly installments in 1988-89, in accordance with procedures specified in the law. Based on all four alternatives, the \$2.5 billion owed from the OASI Trust Fund to the DI Trust Fund, after the repayment of \$2.5 billion in January 1985, is assumed to be repaid in 1986.

Based on alternatives I, II-A, and II-B, the combined assets of the OASI and DI Trust Funds would increase as a percentage of outgo throughout the short-range projection period. Based on alternative III, assets would decline relative to outgo through 1987; after 1989, significant growth would occur. The assets of the HI Trust Fund, as a percentage of annual expenditures, are estimated to increase for at least

the next several years based on all four sets of assumptions. Except for the alternative I projections, HI assets are estimated to begin declining near the end of this decade. As described in the concurrent HI Annual Report, the HI Trust Fund would have sufficient assets to meet obligations throughout the medium-range period based on alternative I, but would be exhausted in 2000 based on alternative II-A, in 1998 based on alternative II-B, and in 1992 based on alternative III. The HI estimates are significantly more favorable than those in last year's report. For alternatives I, II-A, and II-B, this improvement is due to two major actions: (1) The Secretary of Health and Human Services has tentatively decided to set prospective payment rates for fiscal year 1986 at the same level as for fiscal year 1985, and (2) in later years, the limiting annual increase in rates which can be granted without specific justification is equal to the increase in the hospital input price index plus one-quarter percentage point. Prior to the enactment of the Deficit Reduction Act of 1984, the limiting annual increase in rates was equal to the increase in the hospital input price index plus one percentage point. For alternative III, prospective payment rates are assumed to increase by the price index plus one-quarter percentage point in fiscal year 1986 and later.

Table E1 indicates that the combined assets of the OASI, DI, and HI Trust Funds would be sufficient to meet combined obligations through the end of 1994 based on each of the four alternative sets of assumptions. These estimates suggest that a reallocation of tax rates among the OASI, DI, and HI programs, or the extension of interfund borrowing authority beyond 1987, could be sufficient to prevent the potential short-range financing problems of the DI and HI programs for a number of years. Under adverse economic conditions, however, the margin for safety would be small throughout the short-range projection period.

TABLE E1.—ESTIMATED ASSETS¹ OF THE OASI, DI, AND HI TRUST FUNDS, SEPARATE AND COMBINED, AT BEGINNING OF YEAR, AS A PERCENTAGE OF ANNUAL EXPENDITURES DURING YEAR, CALENDAR YEARS 1985-94

Calendar year	OASI	DI	OASDI	HI	Total OASDI and HI
Alternative I:					
1985	24	27	24	32	26
1986	26	33	27	42	30
1987	29	44	31	71	39
1988	38	45	39	87	49
1989	56	56	56	98	65
1990	77	72	76	108	83
1991	102	106	103	118	106
1992	126	139	127	125	126
1993	154	177	156	132	150
1994	178	210	181	136	171
Alternative II-A:					
1985	24	26	24	32	26
1986	25	28	25	42	29
1987	27	35	28	67	36
1988	34	31	34	85	44
1989	50	35	48	92	58
1990	67	41	64	97	71
1991	86	61	84	98	87
1992	106	82	104	97	102
1993	126	103	124	93	117
1994	147	123	145	86	131
Alternative II-B:					
1985	24	26	24	32	26
1986	24	27	25	41	28
1987	26	33	27	63	34
1988	30	28	30	81	40
1989	43	29	41	86	51
1990	57	33	54	88	62
1991	73	50	71	87	74
1992	89	69	87	83	86

TABLE E1.—ESTIMATED ASSETS¹ OF THE OASI, DI, AND HI TRUST FUNDS, SEPARATE AND COMBINED, AT BEGINNING OF YEAR, AS A PERCENTAGE OF ANNUAL EXPENDITURES DURING YEAR, CALENDAR YEARS 1985-94 (Cont.)

Calendar year	OASI	DI	OASDI	HI	Total OASDI and HI
Alternative II-B: (Cont.)					
1983	105	87	104	77	97
1984	122	105	121	67	108
Alternative III:					
1985	24	26	24	32	26
1986	22	23	22	37	25
1987	20	20	20	41	24
1988	20	(*)	19	41	23
1989	23	(*)	21	43	26
1990	25	(*)	21	40	25
1991	30	(*)	26	25	26
1992	36	(*)	32	6	26
1993	43	(*)	39	(*)	25
1994	51	(*)	45	(*)	23

¹Assets of the OASI and DI Trust Funds include advance tax transfers for January.

*The fund is estimated to be exhausted.

Note: The assumptions underlying the estimates for the HI Trust Fund are described in Appendix A of the HI Annual Report. The ratios for OASDI and for OASDI and HI, combined, shown for years after a given fund is estimated to be exhausted, are theoretical and are shown for informational purposes only.

Table E2 shows estimated cost rates for the OASI, DI, and HI programs during 1985-2009, based on alternatives I, II-A, II-B, and III. This table also shows a comparison of total cost rates and total income rates for the three programs combined. As previously discussed, cost rates represent program expenditures as a percentage of taxable payroll. The total income rate represents the combined employee-employer contribution rate for the OASI, DI, and HI programs, plus the OASDI income rate attributable to income from the taxation of OASDI benefits, as described earlier in this report. The definition of taxable payroll is slightly different for OASDI and HI, because of the different coverage provisions for Federal civilian employees and Railroad employees under the two programs. This difference does not materially affect the comparisons. In addition, the cost rates shown for the HI program exclude the cost associated with rebuilding and maintaining the HI Trust Fund at a level suitable for a contingency reserve. Table 8 of the HI Annual Report presents these additional costs.

TABLE E2.—COMPARISON OF ESTIMATED COST RATES AND TOTAL INCOME RATES FOR THE OASI, DI, AND HI PROGRAMS, BY ALTERNATIVE, CALENDAR YEARS 1985-2009
 [As a percentage of taxable payroll¹]

Calendar year	Cost rate			Total	Total income rate	Balance ^a
	OASI	DI	HI ^a			
Alternative I:						
1985.....	10.05	1.15	2.66	13.85	14.31	0.45
1986.....	9.63	1.04	2.61	13.28	14.51	1.24
1987.....	9.70	1.02	2.62	13.34	14.53	1.20
1988.....	9.59	.99	2.66	13.24	15.27	2.03
1989.....	9.48	.94	2.74	13.12	15.29	2.17
1990.....	9.48	.94	2.74	13.15	15.59	2.44
1991.....	9.27	.91	2.80	12.98	15.61	2.63
1992.....	9.38	.92	2.82	13.12	15.64	2.53
1993.....	9.20	.90	2.87	12.97	15.67	2.69
1994.....	9.23	.91	2.89	13.03	15.70	2.67
1995.....	8.82	.88	2.91	12.61	15.66	3.04
1996.....	8.74	.89	2.91	12.55	15.66	3.11
1997.....	8.48	.87	2.92	12.27	15.65	3.38
1998.....	8.21	.86	2.92	11.99	15.64	3.65
1999.....	8.00	.85	2.92	11.76	15.63	3.87
2000.....	7.85	.86	2.92	11.62	15.63	4.01
2001.....	7.73	.87	2.91	11.50	15.63	4.13
2002.....	7.62	.88	2.90	11.40	15.63	4.23
2003.....	7.52	.89	2.89	11.31	15.63	4.32
2004.....	7.44	.91	2.88	11.23	15.63	4.40
2005.....	7.39	.94	2.87	11.19	15.63	4.44
2006.....	7.38	.96	2.86	11.20	15.63	4.43
2007.....	7.39	.99	2.85	11.23	15.64	4.41
2008.....	7.42	1.01	2.86	11.29	15.64	4.35
2009.....	7.50	1.03	2.85	11.39	15.65	4.26
25-year average: 1985-2009.....	8.50	.94	2.83	12.26	15.47	3.20
Alternative II-A:						
1985.....	10.06	1.18	2.66	13.90	14.31	.41
1986.....	9.87	1.09	2.59	13.55	14.52	.97
1987.....	9.81	1.07	2.65	13.52	14.54	1.01
1988.....	9.75	1.04	2.73	13.52	15.28	1.76
1989.....	9.70	1.03	2.80	13.53	15.30	1.77
1990.....	9.77	1.02	2.90	13.69	15.60	1.91
1991.....	9.73	1.01	3.00	13.75	15.63	1.88
1992.....	9.70	1.01	3.09	13.81	15.66	1.85
1993.....	9.67	1.01	3.18	13.87	15.69	1.82
1994.....	9.64	1.02	3.26	13.92	15.72	1.80
1995.....	9.46	1.03	3.33	13.82	15.68	1.87
1996.....	9.26	1.04	3.39	13.69	15.68	1.99
1997.....	9.04	1.05	3.44	13.53	15.68	2.14
1998.....	8.81	1.06	3.50	13.36	15.67	2.31
1999.....	8.63	1.06	3.55	13.24	15.67	2.43
2000.....	8.53	1.08	3.60	13.21	15.67	2.46
2001.....	8.45	1.10	3.64	13.20	15.67	2.47
2002.....	8.38	1.13	3.69	13.20	15.67	2.47
2003.....	8.32	1.16	3.73	13.21	15.67	2.46
2004.....	8.27	1.20	3.78	13.24	15.67	2.43
2005.....	8.25	1.23	3.82	13.30	15.67	2.37
2006.....	8.27	1.27	3.87	13.41	15.68	2.27
2007.....	8.30	1.31	3.92	13.54	15.69	2.15
2008.....	8.36	1.35	3.99	13.71	15.69	1.98
2009.....	8.48	1.39	4.05	13.92	15.70	1.78
25-year average: 1985-2009.....	9.06	1.12	3.37	13.54	15.50	1.95
Alternative II-B:						
1985.....	10.10	1.19	2.67	13.96	14.31	.35
1986.....	9.98	1.11	2.62	13.71	14.52	.81
1987.....	9.97	1.08	2.69	13.74	14.54	.80
1988.....	9.97	1.06	2.78	13.82	15.28	1.46
1989.....	9.95	1.05	2.86	13.85	15.30	1.45
1990.....	10.03	1.04	2.97	14.04	15.61	1.57
1991.....	10.01	1.03	3.08	14.12	15.64	1.52
1992.....	10.00	1.03	3.17	14.20	15.67	1.47
1993.....	9.98	1.03	3.27	14.28	15.70	1.42
1994.....	9.96	1.04	3.36	14.36	15.73	1.37
1995.....	9.81	1.05	3.44	14.30	15.70	1.40
1996.....	9.65	1.07	3.52	14.24	15.70	1.46
1997.....	9.47	1.08	3.58	14.13	15.69	1.56
1998.....	9.26	1.09	3.66	14.01	15.69	1.68
1999.....	9.11	1.10	3.72	13.94	15.69	1.75
2000.....	9.04	1.12	3.79	13.96	15.69	1.73
2001.....	8.98	1.15	3.85	13.98	15.69	1.71
2002.....	8.93	1.18	3.91	14.02	15.69	1.67
2003.....	8.88	1.21	3.97	14.06	15.69	1.63
2004.....	8.84	1.25	4.03	14.12	15.70	1.57
2005.....	8.83	1.29	4.09	14.21	15.70	1.49
2006.....	8.86	1.34	4.15	14.34	15.71	1.36

TABLE E2.—COMPARISON OF ESTIMATED COST RATES AND TOTAL INCOME RATES FOR THE OASI, DI, AND HI PROGRAMS, BY ALTERNATIVE, CALENDAR YEARS 1985-2009 (Cont.)
 [As a percentage of taxable payroll¹]

Calendar year	Cost rate			Total	Total income rate	Balance ^a
	OASI	DI	HI ^b			
Alternative II-B: (Cont.)						
2007.....	8.91	1.38	4.21	14.50	15.71	1.21
2008.....	8.98	1.42	4.29	14.69	15.72	1.03
2009.....	9.11	1.46	4.36	14.93	15.73	.80
25-year average: 1985-2009.....	9.46	1.15	3.52	14.14	15.51	1.37
Alternative III:						
1985.....	10.29	1.23	2.74	14.26	14.31	.05
1986.....	10.58	1.20	2.86	14.65	14.54	-.11
1987.....	10.57	1.18	2.96	14.71	14.56	-.16
1988.....	10.63	1.18	3.12	14.93	15.30	-.37
1989.....	10.94	1.20	3.30	15.44	15.33	-.10
1990.....	10.96	1.18	3.46	15.61	15.64	.03
1991.....	10.86	1.18	3.65	15.69	15.67	-.02
1992.....	10.79	1.17	3.82	15.78	15.70	-.08
1993.....	10.75	1.17	4.00	15.93	15.73	-.20
1994.....	10.82	1.19	4.18	16.19	15.77	-.42
1995.....	10.72	1.22	4.36	16.30	15.74	-.56
1996.....	10.61	1.26	4.54	16.41	15.74	-.67
1997.....	10.46	1.30	4.70	16.46	15.74	-.73
1998.....	10.28	1.33	4.88	16.49	15.74	-.76
1999.....	10.16	1.36	5.06	16.58	15.74	-.85
2000.....	10.13	1.40	5.25	16.78	15.74	-1.04
2001.....	10.11	1.45	5.43	16.98	15.74	-1.24
2002.....	10.09	1.49	5.61	17.20	15.75	-1.45
2003.....	10.08	1.54	5.80	17.42	15.75	-1.67
2004.....	10.08	1.60	5.99	17.67	15.76	-1.91
2005.....	10.11	1.66	6.19	17.96	15.76	-2.19
2006.....	10.18	1.72	6.39	18.29	15.77	-2.52
2007.....	10.27	1.78	6.62	18.67	15.78	-2.89
2008.....	10.39	1.85	6.87	19.11	15.79	-3.31
2009.....	10.57	1.90	7.12	19.58	15.81	-3.78
25-year average: 1985-2009.....	10.46	1.39	4.76	16.60	15.56	-1.05

¹Taxable payroll is slightly different for OASDI and HI, because of different coverage provisions for Federal civilian employees and Railroad employees under the respective programs. The difference does not materially affect the comparison.

^bCost rates exclude amounts required for trust fund building and maintenance.

^aThe balance is the total income rate minus the combined OASDI and HI cost rate. Positive balances are surpluses, and negative balances are deficits.

The pattern of estimated OASI and DI cost rates for the next 25 years was described earlier in this report. The HI costs as a percentage of taxable payroll are estimated to increase generally through this period based on all four alternatives, for reasons described in the HI Annual Report. Based on alternative I, the combined OASDI and HI cost rates would decline steadily from the 1985 level of 13.85 percent of taxable payroll to 11.19 percent in 2005, and thereafter increase to 11.39 percent in 2009. Based on alternative II-A, the combined cost rate would remain around the 1985 level of 13.90 percent of taxable payroll through 1994, then decline through the end of the century, before increasing to 13.92 percent in 2009. Based on alternative II-B, the combined cost rate would remain around the 1985 level of 13.96 percent of taxable payroll through the end of the century, and thereafter increase, reaching 14.93 percent in 2009. Based on alternative III, the combined cost rate would increase steadily from its 1985 level of 14.26 percent of taxable payroll, reaching 19.58 percent in 2009.

Based on alternatives I, II-A, and II-B, the cost rate for OASDI and HI combined would be less than the combined income rate in each year 1985 through 2009. Based on alternative III, however, the combined cost rate would be greater than the combined income rate for every year

after 1985, except 1988 and 1990, when increases in the OASDI contribution rate are scheduled in the law. On average, for the 25-year period, total income for OASDI and HI would exceed total costs by 3.20, 1.95, and 1.37 percent of taxable payroll, respectively, on the basis of alternatives I, II-A, and II-B, while on the basis of alternative III, the combined income rate would be 1.05 percent of taxable payroll less than the combined cost rate.

Table E3 presents a comparison of the cost and income rates for the long-range 75-year projection period, on the basis of the four alternative sets of assumptions.

TABLE E3.—COMPARISON OF ESTIMATED COST RATES AND TOTAL INCOME RATES FOR THE OASI, DI, AND HI PROGRAMS, BY ALTERNATIVE, CALENDAR YEARS 1985-2060
[As a percentage of taxable payroll]¹

Calendar year	Cost rate				Total income rate	Balance ²
	OASI	DI	HI ^a	Total		
Alternative I:						
1985.....	10.05	1.15	2.66	13.85	14.31	0.45
1990.....	9.48	.94	2.74	13.15	15.59	2.44
1995.....	8.82	.88	2.91	12.61	15.66	3.04
2000.....	7.85	.86	2.92	11.62	15.63	4.01
2005.....	7.39	.94	2.87	11.19	15.63	4.44
2010.....	7.61	1.05	2.83	11.49	15.65	4.17
2015.....	8.42	1.11	2.87	12.40	15.62	3.31
2020.....	9.45	1.14	3.03	14.70	15.76	2.15
2025.....	10.26	1.16	3.28	15.26	15.84	1.11
2030.....	10.61	1.11	3.54	15.26	15.85	.58
2035.....	10.45	1.07	3.73	14.87	15.84	.81
2040.....	9.99	1.05	3.83	14.87	15.84	.97
2045.....	9.59	1.07	3.86	14.52	15.84	1.32
2050.....	9.37	1.07	3.86	14.30	15.83	1.53
2055.....	9.21	1.06	3.85	14.12	15.82	1.70
2060.....	9.10	1.05	3.84	14.00	15.81	1.82
25-year averages:						
1985-2009.....	8.50	.94	2.83	12.26	15.47	3.20
2010-2034.....	9.51	1.12	3.18	13.80	15.77	1.97
2035-2059.....	9.61	1.06	3.84	14.51	15.83	1.32
75-year average:						
1985-2059.....	9.20	1.04	3.28	13.52	15.69	2.17
Alternative II-A:						
1985.....	10.06	1.18	2.66	13.90	14.31	.41
1990.....	9.77	1.02	2.90	13.69	15.60	1.81
1995.....	9.46	1.03	3.33	13.82	15.68	1.87
2000.....	8.53	1.08	3.80	13.21	15.67	2.46
2005.....	8.25	1.23	3.82	13.30	15.67	2.37
2010.....	8.62	1.41	4.10	14.14	15.71	1.57
2015.....	9.68	1.52	4.55	15.75	15.77	.03
2020.....	11.06	1.58	5.13	17.77	15.85	-1.91
2025.....	12.26	1.65	5.82	19.74	15.93	-3.81
2030.....	13.04	1.60	6.44	21.07	15.98	-5.09
2035.....	13.21	1.56	6.82	21.59	16.01	-5.58
2040.....	13.01	1.56	7.00	21.57	16.02	-5.56
2045.....	12.84	1.61	7.05	21.50	16.03	-5.48
2050.....	12.84	1.62	7.06	21.51	16.03	-5.48
2055.....	12.83	1.60	7.04	21.46	16.03	-5.44
2060.....	12.80	1.60	7.03	21.42	16.03	-5.40
25-year averages:						
1985-2009.....	9.06	1.12	3.37	13.54	15.50	1.95
2010-2034.....	11.31	1.57	5.42	18.30	15.87	-2.43
2035-2059.....	12.91	1.59	7.01	21.52	16.02	-5.50
75-year average:						
1985-2059.....	11.10	1.43	5.27	17.79	15.80	-1.99
Alternative II-B:						
1985.....	10.10	1.19	2.67	13.96	14.31	.35
1990.....	10.03	1.04	2.97	14.04	15.61	1.57
1995.....	9.81	1.05	3.44	14.30	15.70	1.40
2000.....	9.04	1.12	3.79	13.96	15.69	1.73
2005.....	8.83	1.29	4.09	14.21	15.70	1.49
2010.....	9.26	1.48	4.42	15.16	15.74	.58
2015.....	10.38	1.60	4.90	16.88	15.81	-1.07
2020.....	11.85	1.66	5.53	19.04	15.89	-3.15
2025.....	13.17	1.74	6.27	21.17	15.97	-5.20
2030.....	14.01	1.69	6.94	22.64	16.03	-6.62
2035.....	14.25	1.64	7.36	23.24	16.06	-7.19
2040.....	14.08	1.65	7.55	23.26	16.07	-7.19
2045.....	13.90	1.70	7.61	23.20	16.08	-7.12

TABLE E3.—COMPARISON OF ESTIMATED COST RATES AND TOTAL INCOME RATES FOR THE OASI, DI, AND HI PROGRAMS, BY ALTERNATIVE, CALENDAR YEARS 1985-2060 (Cont.)
[As a percentage of taxable payroll¹]

Calendar year	Cost rate			Total	Total income rate	Balance ²
	OASI	DI	HI ³			
Alternative II-B: (Cont.)						
2050.....	13.88	1.70	7.62	23.20	16.08	-7.12
2055.....	13.86	1.69	7.59	23.14	16.08	-7.06
2060.....	13.83	1.69	7.58	23.10	16.08	-7.01
25-year averages:						
1985-2009.....	9.46	1.15	3.52	14.14	15.51	1.37
2010-2034.....	12.14	1.65	5.85	19.64	15.91	-3.73
2035-2059.....	13.96	1.68	7.57	23.20	16.08	-7.13
75-year average:						
1985-2059.....	11.85	1.49	5.65	19.00	15.83	-3.16
Alternative III:						
1985.....	10.29	1.23	2.74	14.26	14.31	.05
1990.....	10.96	1.19	3.46	15.61	15.64	.03
1995.....	10.72	1.22	4.36	16.30	15.74	-.56
2000.....	10.13	1.40	5.25	16.78	15.74	-1.04
2005.....	10.11	1.66	6.19	17.96	15.76	-2.19
2010.....	10.77	1.94	7.36	20.07	15.82	-4.25
2015.....	12.31	2.13	8.90	23.34	15.91	-7.43
2020.....	14.41	2.27	10.72	27.40	16.03	-11.37
2025.....	16.58	2.42	12.74	31.74	16.15	-15.59
2030.....	18.41	2.41	14.46	35.28	16.26	-19.02
2035.....	19.63	2.40	15.40	37.44	16.35	-21.09
2040.....	20.41	2.46	15.82	38.69	16.42	-22.28
2045.....	21.23	2.60	15.94	39.76	16.50	-23.27
2050.....	22.23	2.63	15.96	40.81	16.55	-24.26
2055.....	23.03	2.59	15.90	41.52	16.59	-24.94
2060.....	23.61	2.57	15.89	42.06	16.62	-25.44
25-year averages:						
1985-2009.....	10.46	1.39	4.76	16.60	15.56	-1.05
2010-2034.....	15.21	2.28	11.49	28.97	16.08	-12.90
2035-2059.....	21.63	2.55	15.86	40.04	16.50	-23.54
75-year average:						
1985-2059.....	15.77	2.07	10.70	28.54	16.04	-12.49

¹Taxable payroll is slightly different for OASDI and HI, because of different coverage provisions for Federal civilian employees and Railroad employees under the respective programs. The difference does not materially affect the comparison.

²Cost rates for HI exclude amounts required for trust fund building and maintenance.

³The balance is the total income rate minus the combined OASDI and HI cost rate. Positive balances are surpluses, and negative balances are deficits.

The trend in long-range OASDI cost rates was described earlier in this report. The HI cost rates are estimated to increase substantially based on the four alternatives, from the current level of 2.7 percent of taxable payroll to about 3.8, 7.0, 7.6, and 15.9 percent, respectively, in 2060, after having peaked at slightly higher levels around 2050. Combined OASDI and HI cost rates would follow a similar pattern, reaching 14.00, 21.42, 23.10, and 42.06 percent of taxable payroll in 2060. The combined cost rates would be less than the combined total income rates throughout the long-range period based on alternative I, but would exceed the combined total income rates for all years after 1990, based on alternatives II-A and II-B, and for all years after 1990, based on alternative III. The combined average actuarial balances for the 75-year period would be a surplus of 2.17 percent of taxable payroll on the basis of alternative I, and deficits of 1.99, 3.16, and 12.49 percent on the basis of alternatives II-A, II-B, and III, respectively.

As noted previously in this report and in the HI Annual Report, long-range estimates such as these are subject to considerable uncertainty and should be interpreted carefully. Based on alternatives II-A and II-B, however, which represent intermediate economic and demographic conditions, the combined cost of the OASDI and HI programs would significantly exceed their combined income after the turn of the century.

APPENDIX F.—STATEMENT OF ACTUARIAL OPINION

It is my opinion that (1) the techniques and methodology used herein in evaluating the actuarial status of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds are generally accepted within the actuarial profession; and (2) the assumptions used and the resulting cost estimates are, in the aggregate, reasonable for the purpose of evaluating the financial and actuarial status of the trust funds, taking into consideration the experience and expectations of the program.

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